

Amendments to the specification

Please amend the specification as follows:

On page 47, please replace the third full paragraph from lines 17-31 with the following:

-- A "substantial deletion" of gp120 V3, as used herein, means that at least about 303 amino acid residues of the V3 loop region (which spans from about amino acid residue number 297 to amino acid residue number 330 of the gp120 sequence) are deleted. More preferably, from about amino acid residue number 303 to residue number 324 are deleted (termed deletion "6,6" for HIV-2/VCP gp120 as shown in Figure 1B, middle panel), and even more preferably, the amino acid residues from about number 297 to number 330 (termed deletion "1,1" for HIV-2/VCP gp120 and shown in Figure 1B, bottom panel), are deleted from the amino acid sequence of gp120 (SEQ ID NO: 5; the full-length amino acid sequence of HIV-2/VCP gp120 is depicted in Figure 16). These deletions, while shown in HIV-2, are for illustrative purposes only and are not limited to HIV-2, but encompass similar V3 truncation mutations of gp120 of HIV-1 and SIV. Further, the skilled artisan would appreciate that deletion of an amino acid residue indicates a deletion of the nucleotide triplet codon that encodes it such that the particular deletion can be readily ascertained with regard to the nucleic acid sequence of the nucleic acid encoding gp120 as set forth in SEQ ID NO:2.--

Please replace the two paragraphs beginning on page 56, lines 30-31 and continuing to page 57, lines 1-19 with the following:

-- The invention includes an isolated nucleic acid encoding a mammalian immunodeficiency virus glycoprotein (gp) 120 polypeptide, or a mutant, derivative, or fragment thereof, wherein the gp120 polypeptide comprises a deletion of hypervariable loop 3 (V3), a deletion of hypervariable loops V1/V2, and further comprises a compensatory mutation and where the nucleic acid sequence of the nucleic acid encoding the gp120 is selected from the group consisting of the sequence of SEQ ID NO: 8, the sequence of SEQ ID NO: 14, and the sequence of SEQ ID NO: 26. Further, the V3 deletion encompasses a deletion from about amino acid residue number 303 to amino acid residue number 324 ($\Delta V3(6,6)$), and a deletion from about amino acid residue number 298 to amino acid residue number 331 ($\Delta V3(1,1)$),

relative to the amino acid sequence of HIV-2/vcp gp120 as provided in SEQ ID NO:5. The invention also encompasses a nucleic acid that is, preferably, at least about 95% homologous, more preferably, 99% homologous, and even more preferably, is the sequence of at least one of SEQ ID NO:11 8, the sequence of SEQ ID NO:17 14, and the sequence of SEQ ID NO:29 26.

The invention encompasses an isolated nucleic acid encoding a mammalian immunodeficiency virus glycoprotein (gp) 120 polypeptide, or a mutant, derivative, or fragment thereof, wherein the gp120 polypeptide comprises a $\Delta V3(6,6)$ deletion, and further comprises a compensatory mutation wherein the nucleic acid sequence of the nucleic acid comprises the sequence of SEQ ID NO:23 20. That is because, as exemplified by HIV-2 clone p16.9 disclosed herein, a mutant of the invention can include a V-3 deletion mutant where V1/V2 region of gp120 is not deleted. --